

**ROCKY FLATS ENVIRONMENTAL  
TECHNOLOGY SITE  
Final OU2 Subsurface IM/IRA  
Implementation and Operation Plan  
Soil Vapor Extraction Pilot Test**

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Environmental Management**

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5	3. New Document Number or Document Number if it is to be changed with this Revision N/A	line 12/19/94
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5. Document Title	Final OU 2 Subsurface IM/IRA IOP for SVE
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Change ☒ Nonintent Change ☐ Editorial Correction ☐ Cancellation

Used Modifications

Management:

led to house the diesel generator during temporary power operation when permanent power is established at the site. The following berm.

the berm liners to remove any dirt or gross contamination in M SOP FO.03, General Equipment Decontamination.

rdance with FO.16, Field Radiological Measurements

place them under T900E (the existing SVE trailer)

nder the liners with an OVD in accordance with ERM SOP

on Detectors (PIDs) and Flame Ionization Detectors (FID)

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el generator removed.

N/A in Blocks 14 and 15. If modification is for any type of change or a cancellation, organizations

		15. Date (if applicable)
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DATE \_\_\_\_\_

## DMR (continuation sheet)

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Refer to 1-A01-PPG-001 for Processing Instructions.

Print or Type All Information (Except Signatures).

25. DMR No. 94-DMR-ERM-047

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Final OU 2 Subsurface IM/IRA IOP for SVE

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8. Item	9. Page	10. Step	11. Proposed Modifications
			<ul style="list-style-type: none"><li>• If visual staining is evident or OVD readings are above background, take one surficial soil sample in accordance with ERM SOP GT.8, Surficial Soil Sampling, from the area where the highest OVD reading or staining is evident.</li><li>• If a sample is collected, containerize surficial soil sample and send to laboratory for Total Petroleum Hydrocarbon (TPH) analysis in accordance with ERM SOP FO.13, Containerizing, Preserving, Handling and Shipping of Soil and Water Samples.</li></ul> <p>The berm will be left open pending the results of the TPH analysis and approval from EG&amp;G to close it. The sand bags used to hold the liners in place will be emptied into the existing sand pile and the bags discarded. Once approval has been established to close the berm, the surrounding gravel pad will be leveled, closing the berm.</p>

12. Justification (Reason for Modification)

IM/IRA operation. Of particular importance will be the contaminant removal rate versus time and the radius of influence. Measurements to be collected during sustained operations are outlined in Appendix D.

### **3.4 WASTE MANAGEMENT**

The waste streams and residues associated with the SVE operations are outlined in the Waste Stream and Residue Identification and Characterization (WSRIC) (EG&G 1993e). Soil and groundwater are two waste streams that occur during SVE operations. Soil is drummed according to Section 2.4, while groundwater is stored in two 10,000-gallon tanks. Water stored in these tanks is to be transported and disposed of by EG&G.

The extracted groundwater will be stored in double-walled storage tanks prior to final disposition at the Building 891/Building 374/OU-2 Trailer T900 Surface Water Treatment facilities.

#### **3.4.1 Generator Berm Closure**

The diesel generator berm was installed to house the diesel generator during temporary power operations. This berm will require closure when permanent power is establish at the site. The following actives will be performed to close the berm.

- Field decontaminate the berm liners to remove any dirt or gross contamination in accordance with ERM SOP FO.3 General Equipment Decontamination.
- Survey liners in accordance with FO.16 Field Radiological Measurements
- Roll up the liners and place them under T900E (the existing SVE trailer)
- Survey the ground under the liners with an OVD in accordance with ERM SOP FO.15 Photoionization Detectors and Flame Ionization Detectors (PID)

- If visual staining is evident or OVD readings are above background, take one surficial soil sample in accordance with ERM SOP GT.8 Surficial Soil Sampling from the area where the highest OVD reading or staining is evident
- If a sample is collected, containerize surficial soil sample and send to laboratory for Total Petroleum Hydrocarbon (TPH) analysis in accordance with ERM SOP FO. 13 Containerizing, Preserving, Handling and Shipping of Soil and Water Samples.

The berm will be left open pending the results of the TPH analysis and approval from EG&G to close it. The sand bags used to hold the liners in place will be emptied into the existing sand pile and the bags discarded. Once approval has been established to close the berm the surrounding gravel pad will be leveled closing the berm.

### 3.5 SAMPLING AND TESTING

This section will describe the sampling procedures for the different media. Soil sampling locations and frequency are summarized in Table 3-3.

#### 3.5.1 Extracted Soil Gas

Soil gas is collected and monitored throughout each test and the sustained operation. Soil gas is collected from four different locations on the SVE unit which are listed below.

- The appropriate vapor extraction well head (wells AV1 and SV1)
- After the primary blower (B-300)
- After the first GAC column (D-400)
- After the second GAC column (D-410)